

\*10\* Survey Information Record. This must be the leading record of each Gravity Survey included in the Job - note that a GRAV UTS Job consists of one or more Gravity Surveys. A code is provided to indicate whether the survey is original or not - see footnotes.

**Resurvey Code:** Enter R if resurveyed over previously established control loops; leave blank otherwise.

**•11. Survey Title Record and •12. •13. •14\* Survey Title Continuation Records (Optional).**  
Use the •11\* record to give the title of the Survey (or of area network or special project of which the survey is a part) and the •12. •13. •14\* records for continuation and/or subtitles, if any.

Survey Title - use \*12\*, \*13\*, \*14\* Survey Title  
Continuation Record(s) as required if the title  
exceeds 70 characters or if subtitles are necessary  
(e.g. the title of an area network followed by  
title of the line).

The title of a survey line should be descriptive of the route followed, i.e., it should indicate the starting and ending locations and prominent "via" points, if any (Example: ALBANY GA VIA MORVEN TO CALLAHAN FL).

**Do not divide words (or other character groups) between the \*11\*, \*12\*, \*13\*, \*14\* Survey Title and Survey Title Continuation Records. Omit punctuation marks (periods, commas, etc.) and parentheses whenever possible. Use ANNEX A state and country codes whenever reference to a state or country is necessary.**

**Abbreviate and/or edit a Survey title in the interest of fitting the entire title on the \*11\* Survey Title Record, if possible.**

Data Code \*11\*, \*12\*, \*13\*, \*14\* Survey Title Records

Sequence Number  
Increment by 10 on successive records to allow for  
insertions.

11\*REOBSERVATIONS OF GRAVITY STATIONS FOR EARTHQUAKE STUDIES, CA  
12\*WISTER SOUTH TO COLEXICO, DIXIELAND EAST VIA EL CENTRO TO HOLTVILLE

**• 15. Comment Record (Optional).** Use this record for any comment's pertinent to the survey. If the comment(s) peacock 70 characters, use another •15• record for continuation. any number of •15• records is allowed. Do not divide words between consecutive •15• records.

**•20. Instrument Information Record.** Submit this record for every instrument identified by the respective Survey Equipment Code and Instrument Serial Number.

	<u>Agency</u> which owns or has the custody of the instrument. For agencies or firms listed in ANNEX C, enter the respective six-character abbreviation. For others, enter the full or abbreviated name (up to 20 characters) - see ANNEX C for examples.	
	<u>Model of Type</u> - examples: G-meter D-meter	DMA
	<u>Manufacturer</u> - examples: La Coste Worden	LACOSTE
	<u>Instrument Serial Number</u> - alphanumeric, left-justified.	G-METER
	<u>NGS Survey Equipment Code</u> - see ANNEX F.	DMA
	<u>Data code</u> (*20* - Instrument Information Record)	LACOSTE
	<u>Sequence Number</u> Increment by 10 on successive records to allow for insertions.	G-METER

21. Intertwining C11081 in later Record. This record went up separately from the C-201081. It is very probable that C-201081 was recorded before C-21081, as it is more complete, and contains many more details.

	Calibration Serial Number- Job specific identifier for corresponding observations.
	<u>Location where calibration was performed.</u>
	<u>Agency which determined or performed the calibration.</u> For agencies or firms listed in ANNEX C, enter the respective six-character abbreviation. For others, enter the full or abbreviated name ( up to 20 characters) - see ANNEX C for examples.
	<u>Date Determined</u> - year, month, day (YYYYMMDD). If day is unknown, leave last two columns blank. If month is unknown, leave last four columns blank.
	<u>Instrument Serial Number</u> - alphanumeric, left-justified.
	<u>Data Code</u> ("21" - Instrument Calibration Header Record)
	<u>Sequence Number</u> Increment by 10 on successive records to allow for insertions.

**•22. Instrument Calibration Information Record.** Submit as many of these records, in proper order (see text), for each instrument when required. For LaCoste and Romberg G-meters this information will normally be extracted from the Table I provided by the manufacturer. For other's meters or for alternate calibration procedures, this information represents the conversion from some observable (dial units, Volts, etc.) to Microcals.

	<u>Mgal Value</u> Decimal point implied after column 77.	
	<u>Counter Dial Units</u> Decimal point implied after column 70.	
	<u>Mgal Value</u> Decimal point implied after column 63.	
	<u>Counter Dial Units</u> Decimal point implied after column 56.	
	<u>Mgal Value</u> Decimal point implied after column 49.	
	<u>Counter Dial Units</u> Decimal point implied after column 42.	
	<u>Mgal Value</u> Decimal point implied after column 35.	
	<u>Counter Dial Units</u> Decimal point implied after column 28.	
	<u>Mgal Value</u> - Corresponding Mgal Value for the preceding Counter Dial Unit. Decimal point implied after column 21.	
	<u>Counter Dial Units</u> - The observed values from the gravity meter during the calibration. The first entry on the first "22" record must be the lowest counter dial unit encountered during calibration (see text chapter 10). Decimal point implied after column 14.	
	<u>Data Code</u> (=22 = Instrument Calibration Information Record)	
	<u>Sequence Number</u> Increment by 10 on successive records to allow for insertions.	

\*23\* Instrument Scale Factor Header Record. - Submit this record for every instrument used during the survey. If the observations do not require scaling, then a scale factor of 1.000 should be submitted.

**24. Instrument Scale Factor Record.** - Submit this record for each instrument and counter dial unit range as specified by the preceding •23\* record. Note: sufficient •23\* and •24\* records must be provided in the job to totally cover the entire range of counter dial values encountered within the survey. More than one •23\* and •24\* records may be included provided that the ranges of scale factors as stated on •23\* records do not overlap.

**\*25. Comment Record (Optional).** Use this record for any comments pertinent to an instrument. If the comment(s) exceed 70 characters, use another \*25\* record for continuation. Any number of \*25\* records is allowed. Do not divide words between consecutive \*25\* records.

“*recruit*”

\*32. Marine Observation Record.—Submit this record for every observation taken aboard ship. A separate record is required for each instrument used. Any instrument may be indicated on the record providing it has been recorded prior to the record.

	Acceptance Criteria - Reject obs. if "R", Accept if blank.
	<u>Reading of Instrument</u> - Decimal implied between column 75 and 76.
	<u>Time of Reading</u> - hours, minutes, seconds (HHMMSS)
	<u>Date of Reading</u> - year, month, day (YYMMDD)
	<u>Height of Instrument (HI)</u> - (mm) - See text.
	<u>Depth Accuracy Code</u> Depth - (MMMMMM) - Depth of bottom surface below sea level. Decimal implied between columns 48 and 49.
	<u>Longitude Accuracy Code</u> Longitude - ( $\pm$ DDDDMMSSs) - Same as *50* record. Decimal implied between column 39 and 40.
	<u>Latitude Accuracy Code</u> Latitude - ( $\pm$ DDMMSSs) - Same as *50* record. Decimal implied between column 29 and 30.
	<u>Instrument Calibration Serial Number</u> - See footnote
	<u>Instrument Serial Number</u> - Same format as *30* record.
	<u>Data Code</u> (*32* - Marine Observation Record)
	<u>Sequence Number</u> Increment by 10 on successive records to allow for insertions.

Instrument Calibration Serial Number - Must correspond with Calibration Information provided in \*21\* and  
\*22\* records.

**\*35\* Comment Record (Optional).** Use this record for any comments pertinent to the observation. If the comment(s) exceed 70 characters, use another \*35\* record for continuation, any number of \*35\* records is allowed. Do not divide words between consecutive \*35\* records.

\*40\* Loop Termination Record. This must be the last record of each gravity loop within every data set submitted.

00000000011111111222222333333444444444455555555566666667777777778 1234567890123456789012345678901234567890123456789012345678901234567890	Data Code (*40* - Loop Termination Record)	nnnnn*40*
	Sequence Number Increment by 10 on successive records to allow for insertions.	00000000011111111222222333333444444444455555555566666667777777778 1234567890123456789012345678901234567890123456789012345678901234567890

- 45\* Comment Record (Optional). Use this record for any comment's pertinent to the loop. If the comment(s) exceed 70 characters, use another \*45\* record for continuation, any number of \*45\* records is allowed. Do not divide words between consecutive \*45\* records.

	<u>Comment</u>	
0000000001111111222222333333334444444455555556666666677777778 123456789012345678901234567890123456789012345678901234567890	Data Code (*45* - Comment Record)	*45*CHECK THIS LOOP
	<u>Sequence Number</u> Increment by 10 on successive records to allow for insertions.	aa 0000000001111111222222333333334444444455555556666666677777778 1234567890123456789012345678901234567890123456789012345678901234567890

••••• 50• Station Designation Record. Submit this record once for each SPSN used during a gravity survey.

**•55. Comment Record (Optional).** Use this record for any comments pertinent a station. If the comment(s) exceed 70 characters, use another •55\* record for continuation, any number of •55\* records is allowed. Do not divide words between consecutive •55\* records.

	<u>Comment</u>	
0000000001 1234567890	Data Code (*55* - Comment Record)	*55* NO ACNS AVAILABLE FOR THIS SURVEY
1111111111222222223333333344444444555555556666666677777778 123456789012345678901234567890123456789012345678901234567890	Sequence Number Increment by 10 on successive records to allow for insertions.	nn ii 0000000001 123456789012345678901234567890123456789012345678901234567890

	<p><b>Data Set Structure:</b> a GRAV OBS Data Set consists of one or more gravity surveys. A gravity survey consists one or more gravity loops.</p>																																																										
<u>Data Set Identification Record.</u> This must be the last record of every data set submitted.	<table border="1"> <tr> <td>Data Set Identification Record</td><td></td><td></td></tr> <tr> <td>*10* - series records</td><td></td><td></td></tr> <tr> <td>*20* - series records</td><td></td><td>FIRST SURVEY</td></tr> <tr> <td>*30* - series records</td><td></td><td></td></tr> <tr> <td>*40* - series records</td><td></td><td></td></tr> <tr> <td>*50* - series records</td><td></td><td></td></tr> <tr> <td>*10* - series records</td><td></td><td>SECOND SURVEY</td></tr> <tr> <td>*20* - series records</td><td></td><td></td></tr> <tr> <td>*30* - series records</td><td></td><td></td></tr> <tr> <td>*40* - series records</td><td></td><td></td></tr> <tr> <td>*50* - series records</td><td></td><td></td></tr> <tr> <td>::::</td><td></td><td>::::</td></tr> <tr> <td>::::</td><td></td><td>::::</td></tr> <tr> <td>*10* - series records</td><td></td><td></td></tr> <tr> <td>*20* - series records</td><td></td><td></td></tr> <tr> <td>*30* - series records</td><td></td><td></td></tr> <tr> <td>*40* - series records</td><td></td><td></td></tr> <tr> <td>*50* - series records</td><td></td><td>LAST SURVEY</td></tr> <tr> <td>Data Set Termination Record</td><td></td><td></td></tr> </table>	Data Set Identification Record			*10* - series records			*20* - series records		FIRST SURVEY	*30* - series records			*40* - series records			*50* - series records			*10* - series records		SECOND SURVEY	*20* - series records			*30* - series records			*40* - series records			*50* - series records			::::		::::	::::		::::	*10* - series records			*20* - series records			*30* - series records			*40* - series records			*50* - series records		LAST SURVEY	Data Set Termination Record			
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